

# Implementation and Effectiveness of Rapid HIV Testing Statewide at Publicly Funded Counseling and Testing Sites in New Jersey



## Paul SM<sup>a</sup>, Cadoff EM<sup>b</sup>, Martin EG<sup>b</sup>, Wolski M<sup>a</sup>, Nichol L<sup>a</sup>, Bruccoleri P<sup>a</sup>, Martin RM<sup>a</sup> New Jersey Department of Health and Senior Serivces, Division of HIV/AIDS Services and buniversity of Medicine and Dentistry of New Jersey, Robert Wood Johnson Medical School

#### **ABSTRACT**

Purpose: The New Jersey Department of Health and Senior Services Division of HIV/AIDS Services (NJDHSS DHAS) introduced rapid HIV testing at selected publicly funded counseling and testing to improve the proportion of high risk persons testing for HIV and to increase the proportion of people who learn their test result.

Methods: Staff at publicly funded counseling and testing sites received counseling training, rapid testing training, completed competency testing and passed proficiency testing prior to offering rapid HIV testing. All rapid testing sites were licensed by NJDHSS. Data was collected using the standard Centers for Disease Control and Prevention counseling and testing form.

**Results:** Rapid testing began at 1 site on November 1, 2003. By 7/26/04 24 sites offered rapid testing. Data received through July 26, 2004 indicates that 3,062 people had rapid testing 3,053 of whom (99.7%) received posttest counseling and their test results. Of the 3,062 people tested, 2,938 (96%) were negative and 110 (4%) were positive. Fourteen test results were not included on the data collection form. The 100positive results included 69 (63%) previously undiagnosed patients. Prior to rapid testing only 65% of patients received posttest counseling and their HIV test results.

Conclusions: Rapid HIV testing has been successfully implemented at publicly funded counseling and testing sites in New Jersey. The percentage of people receiving posttest counseling and test results increased from 65% to 99.7%. Rapid testing identified previously undiagnosed persons. The majority of people who tested positive were previously undiagnosed. Based on the success of rapid testing thus far, NJDHSS plans to expand rapid testing to 179 publicly funded counseling and testing sites.

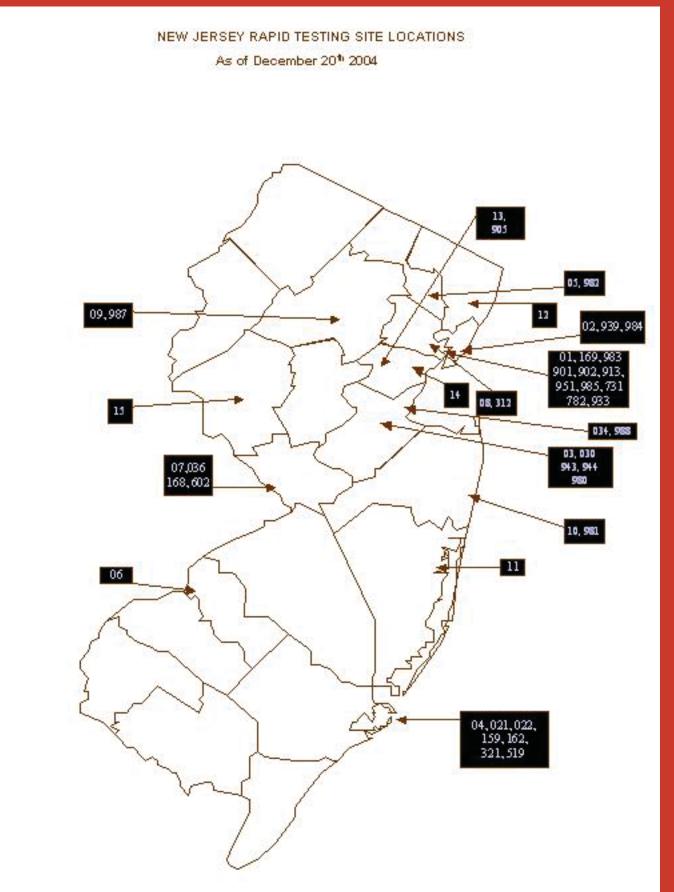
#### INTRODUCTION

- New Jersey is a high prevalence state:
  - 5th in the US in cumulative reported AIDS cases, - 3rd in cumulative reported pediatric AIDS cases, and
  - 1st in the proportion of women with AIDS among its cumulative reported AIDS cases.<sup>1</sup>
- The major focus of HIV prevention and control has been to promote the acceptance of risk reducing behaviors through prevention counseling and testing and to facilitate linkage to medical, prevention and other supports services.<sup>2</sup>
- The percentage of adults in the United States who obtain an HIV test has remained 10 12%per year for more than a decade.<sup>3</sup>
- Approximately 70,000 HIV tests are performed at publicly funded counseling and testing sites annually in New Jersey, with only 65% of persons receiving their results.
- Antibody testing to diagnose HIV was introduced in 1985.4 The standard laboratory testing protocol for HIV requires obtaining a specimen and sending it to a licensed laboratory for testing. The patient needs to return for a second visit to receive test.
- Rapid testing offers the advantage of point-of-care testing with results available in 20 to 40 minutes.
- People do not need to return to obtain their test results.
- More people learn their HIV status, and if infected can be referred for treatment, prevention programs, and social services much more rapidly.

- People who know they are infected with HIV are more likely to practice risk-reduction, especially if a brief behavioral intervention is conducted at the patient visit.<sup>2</sup>
- Four rapid test have been approved by the United States Food and Drug Administration (FDA) for commercial use:
- Single Use Diagnostic System for HIV-1 (SUDS, Abbott Laboratories, Abbott Park, IL—no longer marketed),
- OraQuick HIV1 and the Oraquick Advance HIV-1/HIV-2 (Orasure Technologies, Bethlehem, PA),
- Reveal<sup>TM</sup> (MedMira Laboratories, Halifax, Nova Scotia), and
- Unigold Recombigen (Trinity Biotech plc (Wicklow, Ireland).
- Rapid diagnostic HIV testing has several clinical applications. These include - assisting in diagnosis and counseling of patients with HIV disease,
- reducing vertical HIV transmission for women who present in labor with unknown HIV status, and
- reducing the risk of occupational transmission of HIV.<sup>5</sup>
- This poster describes the implementation and effectiveness of point-of-care rapid testing at publicly funded counseling and testing sites throughout New Jersey.

#### **METHODS**

- Oraquick was selected as the point-of-care rapid test for use at publicly funded counseling and testing sites statewide.
- In 2003 Oraquick was the only FDA approved, CLIA-waived point-of-care rapid test in the United States.
- All 21 publicly funded main counseling and testing sites and their 179 satellite sites in New Jersey were eligible to start rapid testing. In addition to free standing counseling and testing sites, these locations include federally qualified health care centers, STD clinics, hospitals, emergency departments, HIV clinics, prenatal clinics, TB clinics, and family planning clinics.
- A full day training session on counseling for the rapid test was developed, including proper completion of the local fields in the CDC counseling and testing form.
- All counselors completed the training session.
- A laboratory director was selected, QA plan developed, policies and procedure developed, and New Jersey laboratory licenses obtained prior to implementation of rapid testing at each site.
- All persons performing the testing had a full day training on the testing procedure, QA plan, policies, and reducing the risk of occupational blood-borne pathogen transmission.
- All persons conducting testing passed competency and proficiency testing.
- All preliminary positive rapid tests were confirmed with a Western blot performed by the NJDHSS laboratory.
- Each site submitted completed CDC counseling and testing forms to NJDHSS.
- The forms were scanned into the counseling and testing database
- Data analysis was done using SAS (version 8.02, SAS Institute, Cary, NC) and Microsoft Access (version 2000, Microsoft Corporation, Redmond, WA)



many in high prevalence areas.

022 Salem County HD 159 Shore Memorial Prenatal J22 (site 034) Raritan Bay Med. Center 321 Salem Memorial STD 028 (site 951) Newark Beth Israel 519 Cape May Family Planning 005 St. Joseph's Hospital 982 St Joseph's ER 006 Camden County Health Dept. 007 Henry J. Austin Health Cente 036 St. Franck Medical Center ER 68 Henry J. Austin Prenatal 602 Ewing Health Center

- 8,934 (97.4%) tested HIV negative. - 238 (2.6%) had a preliminary positive and a confirmed positive result.

• Through December 9, 2004, 9,176 rapid tests had been conducted.

- 143 of the 238 infected persons (60.0%) were newly identified positives.

- 9,162 (99.9%) of persons tested received posttest counseling and results.

- 4 (0.04%) had a preliminary positive rapid test and a negative Western blot, representing discordant lab results.
- As seen in table 1, the majority of persons tested were minorities, slightly more males (51%) than females (49%) were tested, and the majority of persons tested were in the 20-39 age range.
- Table 1 also shows that the highest proportion of persons testing positive are:
- male (156 of 4,669, 3.3%),
- black (148 of 3,873, 3.8%),
- 40-49 years of age (74 of 1790, 4.1%).

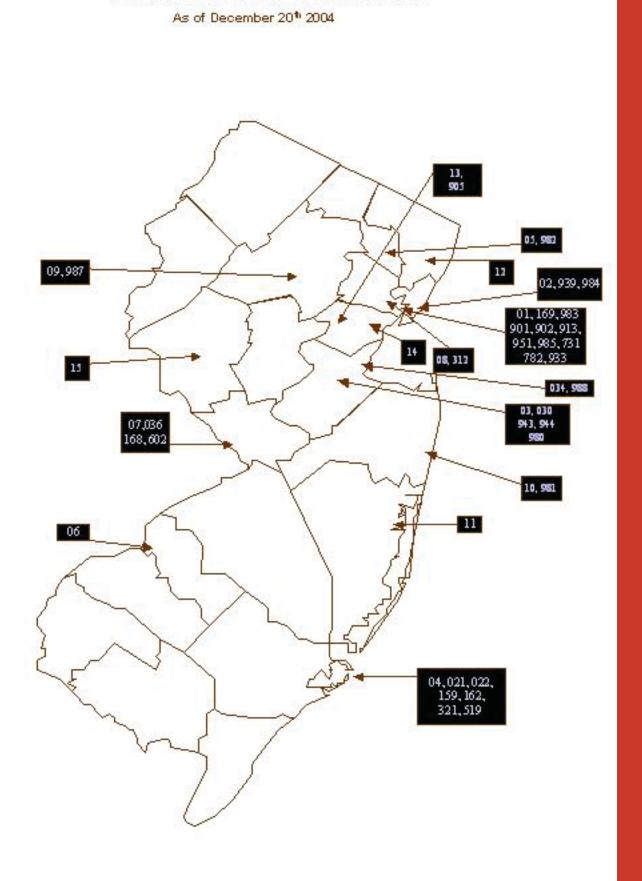
Rapid HIV testing has been successfully implemented at publicly funded counseling and testing sites throughout New Jersey.

CONCLUSIONS

- The percentage of persons receiving posttest counseling and test results increased from 65% prior to rapid testing to 99.9% with rapid testing.
- The infected persons identified by rapid testing reflect the HIV epidemic in New Jersey in that the majority of those identified were black, male, and in the 40-49 year old age range.
- Rapid testing identified previously undiagnosed persons.
- The majority of people who tested positive were previously undiagnosed.
- A minimal number of persons tested had a false positive rapid test.
- Based on the success of rapid testing thus far, NJDHSS plans to expand rapid testing to 179 publicly funded counseling and testing sites.

#### REFERENCES

- . Centers for Disease Control and Prevention. HIV/AIDS Surveillance Report 2002. http:// www.cdc.gov/hiv/stats/addendum.htm
- 2. Centers for Disease Control and Prevention. Incorporating HIV Prevention into the Medical Care of Persons Living with HIV: Recommendations of CDC, the Health Resources and Services Administration, the National Institutes of Health, and the HIV Medicine Association of the Infectious Diseases Society of America. MMWR 2003 July 18; 52(RR12):1-24.
- 3. Centers for Disease Control and Prevention. Number of persons tested for HIV United States, 2002. MMWR 2004 December 3; 53:1110-1113.
- 4. Truong, H-H M and Klausenr JD. Diagnostic Assays for HIV-1 infection. MLO 2004;36 no.
- 5. Paul S, Grimes-Dennis J, Burr C, and DiFerdinando GT. Rapid Diagnostic Testing for HIV: Clinical Implications. 2003(Supplement);100:11-14.



### Demographic Results OVERALL % NEGATIVE POSITIVE DISCORDANT GENDER 4669 51 4505 49 Female Unknown 8934 AGE 13 - 193534 39 20 - 29 2438 27 30 - 39 1790 20 40 - 49 RACE 2685 29 Black 3873 42 2093 23 Hispanic Am.Ind/A **Undetermined** 8934

RESULTS

As seen in Figure 1, by December 1, 2004, 48 sites statewide were conducting rapid testing,

The first site started rapid testing in New Jersey on November 1, 2003.